

HOW CAN MY PET BETTER MY HEALTH?

Factsheet | HGIC 4388 | **Published:** Jun 7, 2021

Owning a pet may be beneficial to your overall health in the long run. Pets act as companions and may keep us comforted in troubling times. They may also help you stay in shape or get back into shape by increasing your activity level. Through these lifestyle changes owning a pet may also help decrease your risk for certain types of diseases and disorders related to your cardiovascular health and blood pressure, as well as helping to manage the risks and side effects associated with diabetes.

Cardiovascular Health

Cardiovascular disease is the leading cause of death in the United States. Primary risk factors for cardiovascular disease include lack of physical activity, being overweight (Body Mass Index, BMI, 25.0 to 30) or obese (BMI of 30 or higher), unhealthy diet, smoking status, high blood pressure, blood glucose, and elevated total cholesterol. Prevention programs attempt to manage the severity of these risks and work with patients to manage those factors that already impact their health. However, despite prevention efforts, over 60% of American adults are considered overweight or obese, and over 50% do not perform the recommended levels of physical activity. While treatment tends to include medications and lifestyle interventions, a new mechanism for managing cardiovascular health is under investigation: the influence of pet ownership. The American Heart Association (AHA) has found associations between pet ownership and the following risk factors for cardiovascular problems:

- Lowered blood pressure.
- Improved recovery time from stress.
- Decreased risk of stroke and heart attack.
- Increased physical activity.
- Improvements in weight loss.

Blood Pressure

The AHA published a study in 2013 which indicated an association between pet ownership and lower blood pressure. Individuals who owned pets had significantly lower systolic blood pressure than individuals who did not own pets. Systolic blood pressure occurs when your heart beats and pushes blood through your body, which creates pressure on blood vessels. Similarly, systolic blood pressure was better in individuals after adopting dogs than before adoption. Those who owned pets had significantly lower



Pet Playtime.
Allison Arnold, ©2021, Clemson Extension

resting heart rates, and these individuals experienced smaller increases in heart rate and blood pressure in response to stress.

Another study carried out by Joel David Wright and his colleagues in 2007 found that the risk of high blood pressure was lower for pet owners than non-pet owners across all ages. The study also concluded that individuals who owned a dog had lower systolic blood pressure than those who never owned a pet.

In 2019, the Mayo Clinic published a study that pet owners had higher cardiovascular health scores than non-owners, with higher scores indicating a lower risk for cardiovascular disease. Therefore, owning a pet may be associated with better cardiovascular health, as it lowers the risk for cardiovascular disease. Better cardiovascular functioning, as a result, may also improve recovery time from stress, which could reduce an individual's risk for cardiovascular disease in the long run. According to this study, pets offer companionship and social support, which may also act as a mechanism for lowering the risk of cardiovascular disease.

Physical Activity

Pet ownership may also act as a tool for increasing exercise in pet owners. The AHA found that dogs may positively influence the level of human physical activity: dog owners in the study engaged in significantly more physical activity and were 54% more likely to obtain recommended amounts.

Likewise, Pamela J. Schreiner's study in *Current Cardiovascular Risk Reports* found that dog owners were more likely to engage in moderate physical activity such as walking. However, according to Dr. Krishnankutty Sudhir of Stanford University Medical Center, this mechanism may be limited to dog owners, with other pets having less influence on the owner's physical activity.

This relationship may be partly due to an increase in behavioral intention associated with dog ownership – meaning that owning a dog positively affects the owner's cognitive beliefs about exercise, especially moderate exercise like walking. Pets, dogs specifically, may also act as sources of motivation and social support for walking, making it easier for their owners to start and continue to exercise. If considered a companion by their owners, any pet may similarly offer encouragement and motivation to their owners and reduce perceived barriers to physical activity.

Increased physical activity helps support a healthy weight and a lower BMI. According to the AHA, individuals who adopted dogs also had a lower incidence of obesity; these individuals also met the recommended amount of physical activity. However, individuals who did not own dogs had a 60% higher risk of being overweight than those who regularly walked their dogs. The AHA also noted that individuals who owned dogs were more likely to remain involved in their weight loss program; this is likely because of the companion animal's added emotional support.

Prediabetes and Diabetes

Research on the impact of pet ownership on a person's risk of prediabetes and diabetes is limited. However, owning a pet may offer social support, making it easier to maintain a healthy lifestyle or implement lifestyle modifications. Similarly, owning a pet may also be a way to increase activity, which is essential for managing prediabetes and diabetes. In 2015, *ADW Diabetes* noted that individuals with diabetes are encouraged to exercise regularly, with a recommended exercise goal of 30 minutes daily. Walking your dog is a great way to fit exercise into your daily routine. In addition to other exercise routines, this daily walk may also benefit the long-term management of weight and insulin.

In 2006, the National Institute of Health (NIH) cited that it may benefit people with diabetes to own dogs. Individuals with diabetes are at an increased risk for cardiovascular complications; owning pets may modulate the relationship between these cardiovascular complications in individuals with diabetes. The findings in this study indicate that adults who suffered heart attacks and owned dogs may be more likely to be alive a year later than those who did not have dogs. Another study published in 2012 by Naoka Aiba and colleagues found that pet owners had higher parasympathetic nervous system stimulation and

lowered sympathetic nervous system activity than individuals who did not own pets. These findings suggest that owning a pet may counteract the adverse effects of diabetes on nervous system activity.

Prediabetes and diabetes are also associated with a higher BMI, lack of physical activity, and higher blood pressure. Pet ownership may help manage the impact of these complications, thus helping to manage the adverse side effects or risks associated with prediabetes and diabetes. However, it is important to recognize that keeping a daily, manageable routine is key to any health management strategy; prediabetes and diabetes are no exception. While helping keep your pet safe, healthy, and happy, is important, it's also necessary to do all those things for yourself. Building routines with your pets, like walking your dog daily or cleaning your pet's cage, can help you build other habits that may help manage your prediabetes or diabetes. This may include daily physical activity or better eating habits.

To summarize, your pet may act as a source of comfort in times of stress and offer companionship and support you may not receive from other people. Whether it be a dog, a cat, a goat, or a fish, your pet creates a sense of belonging and appreciation that may benefit our overall health. Our stress management may improve because seeing pets can trigger a relaxation response. Likewise, you may better maintain physical activity and weight by owning a dog due to daily walks and exercise. Creating a daily routine with your pet may also create stability within your life and improve your overall well-being while decreasing your stress response. Keeping up with something other than yourself creates a sense of responsibility, which may impact strategies you use in being responsible for your health. Owning a pet offers social support, which can influence your reaction to adverse situations that make managing your health a challenge. Through this social support system, owning a pet also can help lower blood pressure, improve cardiovascular functioning, increase activity levels, decrease weight, and manage prediabetes and diabetes.

For more information regarding other prevention strategies, visit:

<https://hgic.clemson.edu/factsheet/prediabetes/>

<https://hgic.clemson.edu/factsheet/diabetes/>

<https://hgic.clemson.edu/factsheet/obesity/>

<https://hgic.clemson.edu/factsheet/hypertension/>

<https://hgic.clemson.edu/factsheet/heart-disease/>

Sources

1. ADW Diabetes. (2015, June 11). *Pet Ownership and Diabetes*. ADW Diabetes Articles. <https://www.adwdiabetes.com/articles/pet-ownership-and-diabetes>
2. Aiba, N., Hotta, K., Yokoyama, M., Wang, G., Tabata, M., Kamiya, K., Shimizu, R., Kamekawa, D., Hoshi, K., Yamaoka-Tojo, M., & Masuda, T. (2012). Usefulness of Pet Ownership as a Modulator of Cardiac Autonomic Imbalance in Patients With Diabetes Mellitus, Hypertension, and/or Hyperlipidemia. *The American Journal of Cardiology*, 109(8), 1164-1170. <https://doi.org/10.1016/j.amjcard.2011.11.055>
3. American Heart Association. (2019, Oct 8). *Dog Ownership associated with longer life, especially among heart attack and stroke survivors*. Newsroom. <https://newsroom.heart.org/news/dog-ownership-associated-with-longer-life-especially-among-heart-attack-and-stroke-survivors>
4. Arhant-Sudhir, K., Arhant-Sudhir, R. and Sudhir, K. (2011). Pet ownership and cardiovascular risk reduction: Supporting evidence, conflicting data and underlying mechanisms. *Clinical and Experimental Pharmacology and Physiology*, 38: 734-738. <https://doi.org/10.1111/j.1440-1681.2011.05583.x>

5. Friedmann, E., & Thomas, S. A. (1995). Pet ownership, social support, and one-year survival after acute myocardial infarction in the Cardiac Arrhythmia Suppression Trial (CAST). *The American Journal of Cardiology*, 76(17), 1213-1217. [https://doi.org/10.1016/S0002-9149\(99\)80343-9](https://doi.org/10.1016/S0002-9149(99)80343-9)
6. Koivusilta, L. K., & Ojanlatva, A. (2006). To have or not to have a pet for better health?. *PloS one*, 1(1), e109. <https://doi.org/10.371/journal.pone.0000109>
7. Levine G.N., Allen K., Braun L.T., Christian H.E., Friedmann E., Taubert K.A., Thomas S.A., Wells D.L., Lange R.A. (2013). Pet ownership and cardiovascular risk: a scientific statement from the American Heart Association. *Circulation*, 127(23):2353-63. doi: 10.1161/CIR.0b013e31829201e1.
8. Rijken, M., van Beek, S.(2011). About Cats and Dogs ... Reconsidering the Relationship Between Pet Ownership and Health Related Outcomes in Community-Dwelling Elderly. *Social Indicators Research*, 102:373–388. <https://doi.org/10.1007/s11205-010-9690-8>
9. Schreiner, P.J. (2016). Emerging Cardiovascular Risk Research: Impact of Pets on Cardiovascular Risk Prevention. *Current Cardiovasc Risk Reports*, 10(8), <https://doi.org/10.1007/s12170-016-0489-2>
10. Wright, J., Kritz-Silverstein, D., Morton, D., Wingard, D., & Barrett-Connor, E. (2007). Pet Ownership and Blood Pressure in Old Age. *Epidemiology*, 18(5), 613-618. Retrieved March 10, 2021, from <http://www.jstor.org/stable/20486436>

Originally published 07/21

If this document didn't answer your questions, please contact HGIC at hgic@clemson.edu or 1-888-656-9988.

Author(s)

Allison Arnold, UPIC Intern, Experiential Education, Clemson University

Melissa Anne Bales, Health Extension Agent, Greenville County, Clemson Extension

Ellie Lane, Rural Health and Nutrition Extension Agent, Clemson University

This information is supplied with the understanding that no discrimination is intended and no endorsement of brand names or registered trademarks by the Clemson University Cooperative Extension Service is implied, nor is any discrimination intended by the exclusion of products or manufacturers not named. All recommendations are for South Carolina conditions and may not apply to other areas. Use pesticides only according to the directions on the label. All recommendations for pesticide use are for South Carolina only and were legal at the time of publication, but the status of registration and use patterns are subject to change by action of state and federal regulatory agencies. Follow all directions, precautions and restrictions that are listed.

Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, gender identity, marital or family status and is an equal opportunity employer.

Copyright © 2023 Clemson University
Clemson Cooperative Extension | 103 Barre Hall Clemson, SC 29634
864-986-4310 | 1-888-656-9988 (SC residents only) | HGIC@clemson.edu